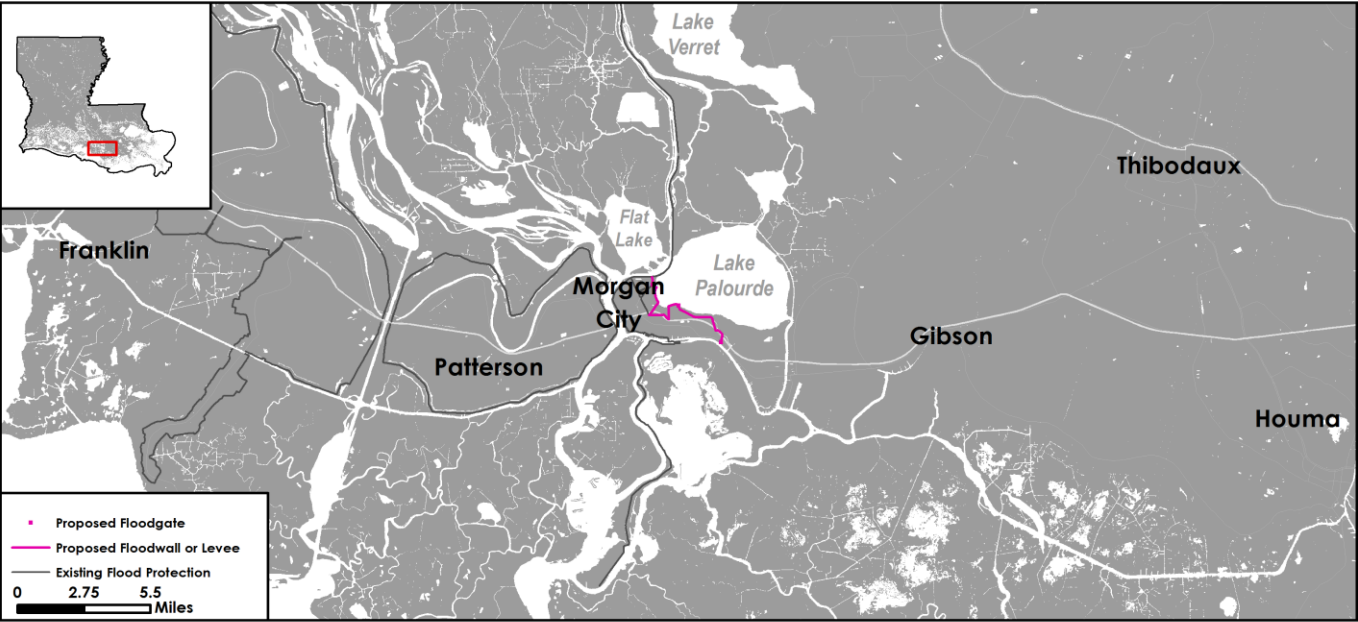


# Morgan City Back Levee

## Structural Protection

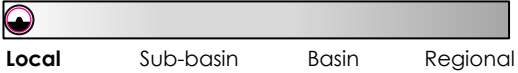
Project ID: 03b.HP.10



### Description

Construction of a levee to an elevation between 10 and 12 feet NAVD88 to protect the northern side of Morgan City. Project features approximately 30,600 feet of earthen levee, approximately 4,600 feet of T-wall, (1) 40-foot swing gate, (1) 30-foot barge gate, and (1) pump station with a total capacity of 1,604 cfs.

### Scale of Influence



### Project Location

St. Mary Parish

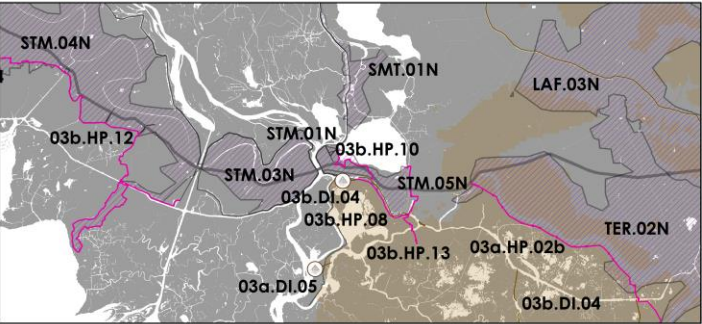
### Project Duration

Planning, Engineering, and Design is estimated to take 2 years.  
Construction is estimated to take 3 years.

### Project Cost Estimate

	Estimated Cost
Planning/Engineering & Design	\$17,600,000
Construction	\$121,900,000
Operations & Maintenance	\$1,000,000
Total	\$140,500,000

### Other Nearby Projects in the Master Plan



### Other Project Area Statistics

<b>Estimated Current Population</b> <small>U.S. Census (2010), U.S. Dept. of Energy Oak Ridge National Laboratory, Land Scan (2011)</small>	12,400
<b>Percent of Population who are Low-to-Moderate Income</b> <small>American Community Survey (2006 - 2010)</small>	44%
<b>Number of Severe Repetitive Loss Properties</b> <small>Governor's Office of Homeland Security (2015)</small>	26

# Morgan City Back Levee

## Structural Protection

Project ID: 03b.HP.10



### Economic Damage

Structural protection projects are evaluated by how they reduce Expected Annual Damage (EAD) for a particular area. EAD represents the average direct economic damage projected to result from storm surge flooding events, from Category 1 or greater storms, in any given year, taking into account both the expected damage and the overall frequency of such storms occurring. EAD is a summary measure of the potential damage averaged over the entire distribution of possible flood events. Damage is also summarized at various return periods (DRP), e.g., 100-year damage being the damage with a 1% chance of occurring or being exceeded in a given year. The following are the economic damage summaries for the Future Without Action (FWOA) and Future With Project (FWP) conditions, for the project as a whole (Table 2), and for each Risk Region (Table 3). EAD and DRP values are reported in millions of dollars.

Table 2: Expected Annual Damage

Year	FWOA	FWP	Difference
0	\$24 M	-	-
25	\$172 M	\$164 M	\$8 M
50	\$1,472 M	\$1,433 M	\$39 M

### Critical Infrastructure

The data in Table 1 was provided by GOHSEP and the Homeland Security Infrastructure Program (HSIP). "Protected" assets are those that otherwise flood in FWOA conditions but are protected by the project.

Table 1: Critical Infrastructure Counts

Asset Type	Protected	Total
Airport Facility	-	-
Gas Processing	-	3
Government/Military	-	-
Electric Power Substation	-	2
Liquefied Natural Gas Terminal	-	-
Louisiana Offshore Oil Port	-	-
Manufacturing/Chemical	-	3
Electric Power Plant	-	3
Port	-	-
Petroleum Pump Station	-	-
Refinery	-	-
Water and Sewer	-	2
Strategic Petroleum Reserve	-	-
Total	-	13

Table 3: Economic Damage by Return Period at Year 50

Risk Region	50 Year		100 Year		500 Year	
	FWOA	FWP	FWOA	FWP	FWOA	FWP
Assumption	\$3,992 M	\$3,937 M	\$4,036 M	\$3,981 M	\$4,076 M	\$4,031 M
Assumption - Amelia	\$49 M	\$49 M	\$50 M	\$50 M	\$50 M	\$50 M
St. Martin	\$612 M	\$611 M	\$618 M	\$617 M	\$622 M	\$621 M
St. Mary - Lower	\$4,117 M	\$4,304 M	\$4,327 M	\$4,376 M	\$4,389 M	\$4,423 M
St. Mary - Morgan City	\$10,461 M	\$11,913 M	\$10,778 M	\$13,151 M	\$11,561 M	\$14,742 M
Total	\$19,230 M	\$20,815 M	\$19,809 M	\$22,175 M	\$20,698 M	\$23,867 M